## **DISCUSSION OF THE CLAIMS**

Claims 1-22 and 28-31 are active in the present application. Claims 2-3 are presently withdrawn from active prosecution. Claims 23 is a cancelled claim. Claim 1 is amended herein to recite a synergistic effect between the components i) and ii) recited in Claim 1. Support for the amendment is found on page 2. Claims 29-31 are new claims. Support for the new claims is found in the original claims and in the examples, see for example the tables on pages 32-45.

No new matter is added.

## **REMARKS/ARGUMENTS**

Applicants further thank Examiner Brown for the helpful and courteous discussion of April 2, 2009. During the discussion Applicants' U.S. representative pointed out that the specification discloses herbicidal compositions that exhibit greater herbicidal activity than the components of the composition individually.

The Examiner appeared to agree that compositions having synergistic activity in comparison to the components individually ay be separately patentable over the art of record.

Applicants thank the Examiner for withdrawing the rejection set forth in the August 7, 2008 Office Action. The Office now rejects the claims as obvious over Nakatani (U.S. 7,238,689) and Ziemer (U.S. 2003/0130120). The Office appears to take the position that it would be obvious to include any of the herbicidal compounds recited as component "ii" of present Claim 1 in an herbicidal composition that includes the isoxazoline derivative of formula (I).

The Office acknowledges that <u>Nakatani</u> discloses an isoxazoline derivative of formula (I) but does not disclose any composition in which the isoxazoline derivative of formula (I) is used together with a second herbicidal active compound (see the paragraph bridging pages 16 and 19 of the January 26, 2009 Office Action). The Office relies on <u>Ziemer</u> as evidence that it would be obvious to include a second herbicidal active compound in herbicidal compositions containing isoxazoline derivates. The Office further relies on <u>Ziemer</u> as support for obviousness-type double patenting rejections in view of two co-pending applications.

Applicants first point out that <u>Ziemer</u> does not disclose any herbicidally active compound that encompasses the isoxazoline derivative of formula (I) of the present claims. The herbicidally active compound of <u>Ziemer</u> has the following structure:

$$\begin{array}{c|c} R \\ \hline \\ N \\ \hline \\ R^1 \end{array} \qquad (R^2)_q$$

The above herbicidally active compound of <u>Ziemer</u> may be compared with the isoxazoline derivative of formula (I) of the present claims:

$$\begin{array}{c|c}
R^{2} & R^{3} \\
R^{4} & R^{6} \\
S(0)_{n} - C & Y \\
R^{5}
\end{array}$$
(I)

There is no overlap between the herbicidally active compound of <u>Ziemer</u> and the isoxazoline derivative of the present claims. The  $\alpha$  carbon of the isoxazole group of formula (I) of present Claim 1 is functionalized with a group of formula  $-S(O)_n$ - $C(R^6)(R^5)(Y)$ . In contrast, the same carbon atom of the herbicidally active compound of formula (I) of <u>Ziemer</u> is functionalized with the group -R. The R group of the herbicidally active compound of Ziemer is described in paragraph [0007] as a "hydrogen or  $(C_1-C_4)$ -alkoxycarbonyl" group.

The  $\alpha$  carbon of the isoxazole group of <u>Ziemer</u> is different from the functional group of the  $\alpha$  carbon atom of the isoxazole group of the isoxazoline derivative of present Claim 1. There is no overlap between formula (I) of <u>Ziemer</u> and formula (I) of present Claim 1.

Moreover, the functional group of the  $\alpha$  carbon of the isoxazole group of the present claims is substantially different from that of <u>Ziemer</u>. In the presently claimed invention this functional group is a sulfur-based group whereas in <u>Ziemer</u> the corresponding group is a hydrogen atom or an alkoxycarbonyl group. Applicants submit that those of ordinary skill in the art readily recognize that such compounds are not analogous nor are they homologs of one another.

Although the Office asserts that <u>Ziemer</u> teaches herbicidal combinations that include a compound in "the same class" as that presently claimed, Applicants submit that such an assertion is factually not correct. As demonstrated above, there is no overlap between the isoxazole-containing compound of <u>Ziemer</u> and the isoxazoline derivative of the present claims. At best, <u>Ziemer</u> discloses herbicidal compound that is different from the one in the present claims in combination with one or more other herbicidally active compounds. Such disclosure in no way suggests the herbicidal composition of the present claims which contains a different herbicidally active component (i.e., an isoxazoline derivative).

Arguendo, even if the Office is correct in asserting that Ziemer discloses isoxazole-based compositions that include a second herbicidally active compound, this has no bearing on the patentability of the presently claimed invention because Ziemer does not disclose or suggest any herbicidal composition that includes the isoxazoline derivative of present Claim 1 in combination with one or more second herbicidally active compounds.

Applicants thus submit that the rejections of the present claims as obvious and/or for obviousness-type double patenting in view of <u>Ziemer</u> are not supportable and should be withdrawn. In the absence of any reasoned technical basis why one of ordinary skill in the art would believe that the isoxazole-containing compounds of <u>Ziemer</u> would behave in exactly the same manner as the isoxazoline derivatives of the present claims, there can be no suggestion or motivation to modify <u>Nakatani</u> in the manner alleged by the Office.

Although the Office asserts that "it is known in the art that combining herbicides increase the efficacy of an herbicide...", Applicants point out that Ziemer discloses this only insofar as the isoxazole group-containing compound of formula (I) is concerned. Ziemer does not disclose that the isoxazoline derivative of the present claims is likewise expected to have increased herbicidal activity in combination with a second herbicidally active compound.

Thus the cited art fails to suggest the presently claimed invention.

Further still, the evidence of record rebuts an assertion of obviousness. Applicants provided factual evidence in the original specification showing that the herbicidal composition of the present claims has improved performance when used for soil treatment (see pages 146-147 of the present specification). Table 18 on page 147 of the present specification proves that using a composition comprising the isoxazoline derivative of the present claims and a second herbicidally active compound provides an herbicidal effect that is greater than the cumulative herbicidal effect of the isoxazoline derivative and second herbicidally active compounds alone.

Applicants draw the Office's attention to Claims 23-27 which recite different embodiments of the invention relating to the improved herbicidal effect demonstrated for the claimed invention.

New independent Claim 29 is drawn to a composition that includes a particular isoxazoline derivative, i.e., compound 3-0188 in Table 7 on page 38 (see the comments below regarding the Declaration under 37 C.F.R. 1.132).

## DECLARATION UNDER 37 C.F.R. §1.132

Applicants submit herewith a Declaration under 37 C.F.R. 1.132. The Declaration provides further evidence rebutting the Office's assertion of obviousness. The Declaration shows that the combination of components i) and ii) recited in the present claims provides a greater than expected herbicidal result in comparison to the result that is calculated theoretically (e.g., expected) according to Colby's formula (see paragraph no. 8 of the Declaration).

Applicants thus submit that the rejection is further not supportable.

**OBVIOUSNESS-TYPE DOUBLE PATENTING** 

The Office further rejected the claims for obviousness-type double patenting in view

of co-pending application 11/948,542; Nakatani (U.S. 7,238,689); and co-pending application

10/480,376. Each of the obviousness-type double patenting rejections is made in

combination with the Ziemer patent discussed above. Ziemer discloses compositions that

have an isoxazole group-containing compound that is different from and does not encompass

the isoxazoline derivative of the present claims.

The Office asserts that it is known that combining herbicides can increase the efficacy

of an herbicide, Applicants submit that the Office has proven only that the compositions of

Ziemer may be mixed with one or more herbicidally active compounds. The Office failed to

demonstrate that it is known by those of skill in the art that the isoxazoline derivative of the

present claims may be mixed with one or more other herbicidally active compounds to

improve efficacy of the herbicidal composition. Thus, the rejection of the claims for

obviousness-type double patenting in view of the combination of one or more co-pending

applications and/or issued patents in combination with Ziemer is not supportable and should

be withdrawn.

For the reasons stated above in detail, Applicants submit that all now-pending claims

are in condition for allowance. Applicants request withdrawal of the rejection and the

allowance of all now-pending claims.

Respectfully submitted,

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